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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,207	07/30/2001	Pau Soler	60990045Z142	3960

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EXAMINER	
CARTER, TIA A	

ART UNIT	PAPER NUMBER
2626	

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/919,207	SOLER ET AL.	
	Examiner	Art Unit	
	Tia A Carter	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-27 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) 27 is/are allowed.

6)☒ Claim(s) 1-4,15,17,18,20-23 and 26-27 is/are rejected.

7)☒ Claim(s) 5-14,16,19,24 and 25 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 15, 17-18, 20-23 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Baker et al. (US. 6832824).

Regarding claim 1, Baker et al. disclose an automatic method of linearizing a color printing system (1), using measurements made with an optical sensor (51) that is onboard the system, for forming images on plural printing media (Fig. 1, col. 15, lines 36-51); said method comprising the steps of:

referring to a single calibration, used in common for substantially all the plural media, of the sensor; said single calibration being with respect to exclusively a single one of the plural media (fig. 2, col. 17, lines 32-46);

using the sensor (51), as calibrated by the single common calibration, to colorimetrically linearize the system for printing with each of plural colorants on

any one medium, of the plural media (fig. 2, col. 17, lines 43-53; fig. 6, col. 19, lines 1-15); and

thereafter maintaining the system as thus linearized for printing on said one medium (fig. 2, col. 19, lines 1-19).

Regarding claim 2., Baker et al. disclose the method of claim 1, further comprising the step of: repeating the using and maintaining steps for at least one other medium, of the plural media (fig. 2, col. 19, lines 15-20).

Regarding claim 3, Baker et al. disclose the method of claim 1, further comprising the step of: repeating the using and maintaining steps for at least five others of the plural media (fig. 2, col. 19, lines 15-20).

Regarding claim 4, Baker et al. disclose the method of claim 1, further comprising the step of: before the using step, performing the single common calibration using a particular one medium, of all the plural media, which has substantially greatest contrast between darkest full inking and unprinted area (figs. 6, col. 20, lines 10-17 and lines 31-66).

Regarding claim 15, Baker et al. disclose the method of claim 1, wherein: the using step provides CIELAB-space linearity in k* for yellow, and in A* for other colorants (fig. 29, col. 24, lines 28-37).

Regarding claim 17, Baker et al. disclose the method of claim 16, wherein: the operating step comprises measuring an unprinted area of said any one medium, of the plural media, as a reference white point for the linearizing (fig. 7, col. 20lines 37-48).

Regarding claim 18, Baker et al. disclose the method of claim 16, wherein: the ramp-printing substep comprises printing each respective ramp with negligible hue-angle variation along the ramp (fig. 7, col. 19, lines 59-65; col. 20, lines 31-36).

Regarding claim 20, Baker et al. disclose the method of claim 1, wherein: said single calibration comprises plural subcalibrations for plural ink types respectively (fig. 3, col. 18, lines 58-60).

Regarding claim 21, Baker et al. disclose the method of claim 20, wherein: said plural ink types respectively comprise pigment inks and dye inks (fig. 17, col. 25, lines 13-21).

Regarding claim 22, Baker et al. disclose an automatic method of linearizing and then using a color printing system (1), based upon measurements made with an optical sensor (51) that is onboard the system, to form a color image on any one of plural printing media (Fig. 2, col. 17, lines 32-46); said method comprising the steps of:

referring to a single calibration, used in common for substantially all the plural media, of the sensor (51); said single calibration being with respect to exclusively a single one of the plural media (fig. 2, col. 17, lines 32-53);

using the sensor (51), as calibrated by the single common calibration, to colorimetrically linearize the system for printing with each of plural colorants on any one medium, of the plural media (fig. 2, col. 17, lines 43-53; fig. 6, col. 19, lines 1-15); and

thereafter using the system without further sensor calibration to form a properly colorimetrically linearized image on any different one medium, of the plural media (fig. 2, col. 19, lines 1-19).

Regarding claim 23, Baker et al. disclose the method of claim 22, wherein: of all the plural media, said single one has greatest contrast between darkest full inking and unprinted area (figs. 6, col. 20, lines 10-17 and lines 31-66).

Regarding claim 26, Baker et al. disclose a printer for forming images on plural printing media; said printer comprising: an optical sensor (51) that is onboard the system (Fig. 8, col. 14, lines 24-36);

first processor portions (91) for performing a first program that operates the printer and sensor to develop a single calibration of the sensor with respect to exclusively a single one of the plural media, but for use in common with substantially all the plural media (fig. 7, col. 18, lines 47-60);

second processor portions (91) for performing a second program that operates the printer, and the sensor as calibrated by the single common calibration, to colorimetrically linearize the system for printing with each of plural colorants on any one medium, of the plural media (fig. 7, col. 20, lines 27-36); and

a memory (91) for thereafter maintaining linearization data, for the printer as thus linearized, for printing on said any one medium of the plural media (fig. 17, col. 25, lines 13-21).

Claim Rejections - 35 USC § 112

3. Claims 26-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Fig 4, page 44 lines 9-10 refer to portions of an apparatus and page 45 line 3-4 refer to a processor not "first processor portion" or "second processor portion", the claimed limitation as cited below is not supported by the specification as identified.

Regarding claim 26, the applicant cites "first processor portions" and "second processor portions" it is unclear to the Examiner how portions of a

processor operates. It is known that the processors functions as a whole and not in portion. Clarity is required.

Regarding claim 27, the applicant cites "deriving a single sensor calibration from ideal properties of color inks, without making any optical measurement using the sensor", it is unclear after reviewing the specification how applicant derives the single sensor calibration without performing optical measurement. Clarity is required.

Allowable Subject Matter

4. Claims 5-14, 16, 19 and 24-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lesniak et al. (US. 2002/0037191) and WLODARCZYK (WO 95/08183) are cited to show related art with respect to calibration of a media.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tia A Carter whose telephone number is 703 - 306-5433. The examiner can normally be reached on M-F (7:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A Williams can be reached on 703-305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tia A Carter
Examiner
Art Unit 2626

TAC
3/7/2005

KAWilliams

KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER